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## METHODS AND APPARATUS FOR PERFORMING EFFICIENT INVERSE TRANSFORM OPERATIONS

## Abstract of the Disclosure

According to the present invention, methods and apparatus for performing efficient inverse transform operations are provided. Zero patterns are identified in a block of transform coefficients to derive zero pattern information. Using the zero pattern information, inverse transform operations are performed on a subset of the columns of the block of transform coefficients. Zero patterns can optionally be identified in the resulting block. One-dimensional inverse transform operations are then performed on the rows of the resulting block to complete the inverse transform. In another example, one-dimensional inverse transform operations can be performed first on the rows and then on the columns.